

REMARKS**Summary of the Office Action**

Claims 1, 3, 5, and 9 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Ikeda et al. (US 6,671,025).

Claims 2 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikeda et al. in view of Miyazaki et al. (US 5,978,061) and Yanagawa et al. (US 6,583,846).

The Amendment filed on August 19, 2004 is objected to under 35 U.S.C. § 132.

Claims 1-9 stand rejected under 35 U.S.C. § 112, first paragraph.

Claims 1-9 stand rejected under 35 U.S.C. § 112, second paragraph.

Claims 1-4 are objected to for a minor informality.

The Specification is objected to for various informalities.

Summary of the Response to the Office Action

Applicants have amended claims 1 and 2 to further define the invention. Accordingly, claims 1-9 are pending for consideration.

New Matter Objection

The Amendment filed on August 19, 2004 is objected to under 35 U.S.C. § 132 because it allegedly introduces new matter into the disclosure. Specifically, the Examiner alleges that claims 1 and 5 now recite the structural features of “wherein each of the plurality of column spacers are separated from one another and are disposed at intersections of the gate and data lines” that are not supported by the original disclosure. The Examiner states that “not every spacer is disposed at the intersection of the gate and data lines.” Applicants respectfully disagree.

Claims 1 and 5 both recite the specific structural feature of “each of the plurality of column spacers are separated from one another and are disposed at intersections of the gate and data lines.” However, Applicants respectfully assert that the recited structural features of claims 1 and 5 do not require that each of the plurality of column spacers are disposed at *each* intersection of the gate and data lines. Applicants respectfully submit that the Examiner’s interpretation of the structure recited by claims 1 and 5 is neither reasonable nor commensurate with Applicants’ disclosure. Clearly, Applicants’ disclosed invention is directed to **not** placing column spacers at each intersection of the gate and data lines. Thus, Applicants have not claimed a structure such that each of the column spacers are placed at each intersection of the gate and data lines.

For at least the above reasons, Applicants respectfully assert that the Amendment filed on August 19, 2004 is proper and does not introduce new matter into the disclosure of the invention. Thus, Applicants respectfully request that the objection to the Amendment filed on August 19, 2004 under 35 U.S.C. § 132 be withdrawn.

Objections to the Specification

The Specification is objected to for various informalities. Specifically, the Examiner objects to the Abstract of the Disclosure “because it describes what are not part of the invention.” Accordingly, Applicants have amended the Abstract in accordance with the Examiner’s comments. Thus, Applicants respectfully request that the objection to the Abstract be withdrawn.

The Examiner further objects to the Title of the Invention. Specifically, the Examiner alleges that the Title “is not descriptive.” Applicants respectfully disagree.

The present Title of the Invention recites “LIQUID CRYSTAL DISPLAY DEVICE WITH COLUMN SPACERS,” which Applicants respectfully submit is clearly indicative of the invention to which the claims are directed. Accordingly, Applicants have not amended the Title, and respectfully request more detailed reasoning on the Examiner’s part as to why the Title is not clearly descriptive of the claimed invention.

Claims Objections

Claims 1-4 are objected to for a minor informality. Accordingly, Applicants have amended claim 1 in accordance with the Examiner’s comments to recite “a plurality of column spacers selectively formed on the color filter substrate, the column spacers having a semi-spherically shaped end portion adjacent to the TFT substrate.” Thus, Applicants respectfully request that the objection to claims 1-4 be withdrawn.

All Claims Comply with 35 U.S.C. § 112

Claims 1-9 stand rejected under 35 U.S.C. § 112, first and second paragraphs.

With regard to claims 1-9 being rejected under 35 U.S.C. § 112, first paragraph, Applicants respectfully assert that the grounds for the rejection are unfounded for at least the reasons set forth above under the heading New Matter Objection. In addition, Applicants respectfully assert that support for the features recited by independent claims 1 and 5, as present herein, may be found throughout the originally-filed specification and corresponding drawings. Thus, Applicants respectfully assert that the Examiner’s interpretation of the structures recited by claims 1 and 5 is neither reasonable nor commensurate with Applicants’ disclosure, and that the Examiner is “reading” features into claims 1 and 5 that simply do not exist.

Initially, with regard to the rejection of claims 1-9 under 35 U.S.C. § 112, second paragraph, Applicants respectfully assert that independent claim 1 is not cited as containing omissions of allegedly essential structural cooperative relationships of elements. Thus, Applicants respectfully submit that claim 1 is improperly rejected under 35 U.S.C. § 112, first paragraph.

Applicants respectfully assert that both claims 2 and 5 recite specific relative structural features including, in part, column spacers that are “disposed at every two pixels along a column direction.” Accordingly, Applicants respectfully assert that claims 2 and 5 each recite structural cooperative relationships between the column spacers that may be considered essential to the claimed invention.

With regard to claim 7, Applicants respectfully assert that the recitation of “wherein each of the plurality of column spacers are spaced apart from one another by a width of about 279 to 600 μ m” denotes the claimed disposition of the column spacers “at every two pixels along a column direction,” as recited by independent claim 5. Accordingly, Applicants respectfully assert that claim 7 clearly recites structural cooperative relationships between the column spacers that may be considered essential to the claimed invention.

For at least the above reasons, Applicants respectfully assert that claims 1-9 particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Moreover, Applicants respectfully assert that claims 1-9 clearly recite structural cooperative relationships between the column spacers that may be considered essential to the present invention, as claimed. Thus, Applicants respectfully request that the rejection of claims 1-9 under 35 U.S.C. § 112, first and second paragraphs, be withdrawn.

All Claims Define Allowable Subject Matter

Claims 1, 3, 5, and 9 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Ikeda et al. (US 6,671,025), and claims 2 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikeda et al. in view of Miyazaki et al. (US 5,978,061) and Yanagawa et al. (US 6,583,846). Applicants respectfully traverse these rejections for the following reasons.

Initially, Applicants respectfully assert that, contrary to the Examiner's allegations in the section of the Office Action entitled Response to Arguments, recitation of "each of the plurality of column spacers are separated from one another and are disposed at intersections of the gate and data lines" is, in fact, recited by each of claims 1 and 5. Accordingly, Applicants respectfully assert that the Examiner has failed to consider every feature recited by claims 1 and 5, and thus, the Office Action dated November 16, 2004 is both improper and incomplete. Thus, Applicants respectfully assert that until all of the features of all of the claims have been properly considered and examined, that next Office Action should not and cannot be made final.

Independent claims 1 and 5 both recite an LCD device including a plurality of column spacers that are each "separated from one another and are disposed at intersections of the gate and data lines." In contrast to Applicants' claimed invention, Ikeda et al. teaches different arrangements of continuous zig-zag projection patterns that extend across pixel regions of a TFT substrate. In further contrast to Applicants' claimed invention, both Miyazaki et al. and Yanagawa et al. are completely silent with respect to placing column spacers at intersections of gate and data lines. Thus, Applicants respectfully submit that none of Ikeda et al., Mitazaki et al., and/or Yanagawa et al., whether taken singly or combined, teach or suggest an LCD device including a plurality of column spacers that are each "separated from one another and are

disposed at intersections of the gate and data lines,” as recited by independent claims 1 and 5, and hence dependent claims 2-4 and 6-9.

For at least the above reasons, Applicants respectfully submit that none of Ikeda et al., Mitazaki et al., and Yanagawa et al., whether taken singly or combined, teach or suggest Applicants’ claimed features of independent claims 1 and 5, and hence dependent claims 2-4 and 6-9. Applicants respectfully assert that the rejections under 35 U.S.C. §§ 102(e) and 103(a) should be withdrawn because the above-discussed novel combination of features are neither taught nor suggested by any of the applied references, whether taken alone or in combination.

CONCLUSION


In view of the foregoing, Applicants respectfully request entry of the amendments, reconsideration, and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants’ undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under

37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Dated: February 16, 2005

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